

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 39, 59, 78, 103, 114, cancel claims 2-23, 27-38, 40-58, 62-77, 79-100, 104-113, 115-132, 136-147, and add claims 148-158 as follows:

1. (Currently Amended) A system for allocating bandwidth on a network comprising:

[[A.]] one or more network nodes wherein said one or more network nodes further comprises a first processing element, a compression module, a first local network interface, and a first bandwidth adjustment module, wherein said compression module further comprises a plurality of compression parameters and said first processing element controls said bandwidth adjustment module, said first local network interface, and said compression module;

[[B.]] a data interface connected to said one or more network nodes;

[[C.]] a master node wherein said master node further comprises a second processing element, a second local network interface, and a second bandwidth adjustment module, and wherein said second processing element controls said second network interface and said second bandwidth adjustment module;

[[D.]] wherein said one or more network nodes and said master node communicate using said first local network interface and said second network interface, wherein said first local network interface and said second local network interface communicate over a local network having changing network conditions; and

[[E.]] wherein said second bandwidth adjustment module dynamically changes at least one of said compression parameters in said first bandwidth adjustment module based on changing network conditions on the local network, wherein said changing network conditions

are detected by said second local network interface, and wherein said changing network conditions affect network bandwidth.

2.-23. (Canceled).

24. (Previously Presented) A system for allocating bandwidth on a network as recited in claim 1 further comprising an external network connected to said master node.

25. (Previously Presented) A system for allocating bandwidth on a network as recited in claim 24 further comprising a remote monitoring station connected to said external network wherein said remote monitor station receives data from said data interface.

26. (Previously Presented) A system for allocating bandwidth on a network as recited in claim 24 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN).

27.-38. (Canceled).

39. (Currently Amended) A system for allocating bandwidth on a network comprising:

[[A.]] a first network node wherein said first network node further comprises a first processing element, a first bandwidth adjustment module, a first local network interface, and a compression module wherein said compression module contains a plurality of compression parameters and wherein said first processing element controls said first bandwidth adjustment module, said first local network interface, and said compression module;

[[B.]] a data interface connected to said first network node;

[[C.]] a second network node configurable as a master node, a slave master node, and a network node, wherein said second network node further comprises a second processing element, a second bandwidth adjustment module, a second local network interface, and

wherein said second processing element controls said second local network interface and said second bandwidth adjustment module;

a third network node, wherein said third network node further comprises a third processing element, a third bandwidth adjustment module, a third local network interface, a third compression module wherein said third compression module contains a plurality of compression parameters, and wherein said third processing element controls said third bandwidth adjustment module, said third local network interface and said third compression module;

[[D.]] wherein said first network node [[and]], said second network node and said third network node electronically communicate using said first local network interface[[and]], said second local network interface node and said third local network interface; and

[[E.]] wherein said second bandwidth adjustment module dynamically changes at least one of said compression parameters in said first bandwidth adjustment module or said third bandwidth adjustment module based on network conditions on the local network wherein said network conditions are detected by said second local network interface.

40.-58. (Canceled).

59. (Currently Amended) A system for allocating bandwidth on a network as recited in claim 39 further comprising an external network connected to said first, [[or]] second, or third network node.

60. (Previously Presented) A system for allocating bandwidth on a network as recited in claim 59 further comprising a remote monitor station connected to said external network wherein said remote monitor station receives data from said data interface.

61. (Previously Presented) A system for allocating bandwidth on a network as recited in claim 59 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN).

62.-77. (Canceled).

78. (Currently Amended) A method for allocating bandwidth on a network comprising the steps of:

[[A.]] receiving data on a data interface on a network node which comprises a first bandwidth adjustment module, a first local network interface, and a compression module with a plurality of compression parameters;

[[B.]] sampling network conditions from a second local network interface with a second bandwidth adjustment module in a master node, wherein said first local network interface and said second local network interface communicate over a local network having changing network conditions;

[[C.]] determining the bandwidth requirements for data received on said data interface based on said changing network conditions in said second bandwidth adjustment module, wherein said changing network conditions affect network bandwidth; and

[[D.]] notifying said first bandwidth adjustment module of said bandwidth requirements which causes said network node to change said compression parameters for said received data.

79.-100. (Canceled).

101. (Previously Presented) A method for allocating bandwidth on a network as recited in claim 78 further comprising an external network connected to said master node.

102. (Previously Presented) A method for allocating bandwidth on a network as recited in claim 101 further comprising a remote monitor station connected to said external network wherein said remote monitor station receives data from said data interface.

103. (Previously Presented) A method for allocating bandwidth on a network as recited in claim 101 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN).

104.-113. (Canceled).

114. (Currently Amended) A method for allocating bandwidth on a network comprising:

[[A.]] receiving data on a data interface on a first network node which comprises a first bandwidth adjustment module, a first local network interface, and a compression module with a plurality of compression parameters;

[[B.]] sampling network conditions from a second local network interface with a second bandwidth adjustment module in a second network node, wherein said first local network interface and said second local network interface communicate over a network having changing network conditions;

[[C.]] determining the bandwidth requirements for data received on said data interface based on said changing network conditions in said second bandwidth adjustment module, wherein said changing network conditions affect network bandwidth; and

[[D.]] notifying said first bandwidth adjustment module of said bandwidth requirements which causes said first network node to change said compression parameters for said received data.

115.-132. (Canceled).

133. (Previously Presented) A method for allocating bandwidth on a network as recited in claim 114 further comprising an external network connected to said master node.

134. (Previously Presented) A method for allocating bandwidth on a network as recited in claim 133 further comprising a remote monitor station connected to said external network wherein said remote monitor station receives data from said data interface.

135. (Previously Presented) A method for allocating bandwidth on a network as recited in claim 133 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN).

136.-147. (Canceled).

148. (New) The system of claim 39 wherein said second network node operates as a master node if no other node is a higher ranking node.

149. (New) The system of claim 39 wherein said second network node operates as a slave node if there is a higher ranking node.

150. (New) The system of claim 39, further comprising:
a local device identifier; and

wherein responsive to the local device identifier prohibiting the second network node from operating as a master node, the second network node operates as a network node.

151. (New) The system of claim 39, wherein the master node is configured to control bandwidth for one or more data sources on the local network.

152. (New) The system of claim 39, wherein the first network node is configured to control bandwidth for one or more data sources connected to the first network node.

153. (New) The system of claim 1 wherein the network is a power line network.

154. (New) The method of claim 78 wherein the network is a power line network.

155. (New) The method of claim 114 wherein the network is a power line network.

156. (New) The system of claim 153, wherein one of the network conditions used by the second bandwidth adjustment module in changing the compression parameters comprises noise on the network from one or more devices connected to the power line network.

157. (New) The method of claim 154, wherein one of the network conditions used to determine the bandwidth requirements comprises noise on the network from one or more devices connected to the power line network.

158. (New) The method of claim 155, wherein one of the network conditions used to determine the bandwidth requirements comprises noise on the network from one or more devices connected to the power line network.